

[illegible]

A lubrication system for an expendable gas turbine engine (20) having a rotatable shaft (26) is provided. Bearings (28) journal the shaft (26) for rotation about an axis. The system includes a vessel (46) for containing lubricating oil, a conduit (58) extending from the vessel (46) to the bearings (28), and a solenoid operated valve (70,76) in the conduit (58) and operable to only either fully open or fully closed. A control circuit (16) is provided for pulsing the solenoid (70) at a controlled rate to alternately (a) allow oil flow and (b) halt oil flow to the bearings (28) for a time insufficient to cause oil starvation of the bearings (28).